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sending said encrypted message with said unencrypted IP address and said encrypted IP address to a receiving unit;

providing said receiving unit having an integrated encryption circuit embedded with an decryption algorithm;

receiving with said receiving unit said encrypted message with said unencrypted IP address and said encrypted IP address;

decrypting with said receiving unit said encrypted IP address, thereby resulting in a decrypted IP address;

storing said decrypted IP address in a first register built into said integrated encryption circuit within said receiving unit;

storing said unencrypted IP address into a second register built into said integrated encryption circuit within receiving unit;

means for comparing said second register storing unencrypted IP address to said first register storing said decrypted IP address;

decrypting said message if said second register storing unencrypted IP address matches said first register storing said decrypted IP address; and

means for halting decryption process if said second register storing unencrypted IP address does not match said first register storing said decrypted IP address.

8. (New) A method of encrypting Internet, Intranet, or e-mail messages, comprising: providing a communication device in communication with a private encryption key generator;

generating a primary private encryption key; encrypting data with said primary private encryption key; providing a public encryption key and second private encryption key pair; Applicant: Czajkowski et al. Serial No.: 09/490,941

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encrypting said primary private encryption key and with a public/second private encryption key pair; and

sending said data encrypted with said primary private encryption key and said primary private encryption key encrypted with said public/second private encryption key pair to a receiving unit.

- 9. (New) The method of claim 8, wherein access to said private encryption key generator is password controlled.
- 10. (New) The method of claim 9 wherein said password is user defined.
- 11. (New)The method of claim 8 wherein said encryption key generator is located within a communication device.
- 12. (New) The method of claim 8 wherein said primary private encryption key is randomly generated.
- 13. (New) A method of decrypting Internet, Intranet, or e-mail messages, comprising: providing a communication device in communication with a private encryption key generator;

receiving an encrypted message with said communication device, said message having data encrypted with a primary private encryption key and a primary private encryption key encrypted with a public/second private encryption key pair;

providing access to said private encryption key generator;

decrypting said public/second private encryption key pair with said private encryption key generator, thereby providing said primary private encryption key; and decrypting said data with said primary private encryption key.

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- 14. (New) The method of claim 13 wherein access to said private encryption key generator is password controlled.
- 15. (New) The method of claim 14 wherein said password is user defined.
- 16. (New) The method of claim 13 wherein access to said primary encryption key generator is requires verification.
- 17. (New) The method of claim 16 wherein said verification comprises a Certification of Authority.
- 18. (New) A method of encrypting Internet, Intranet, or e-mail messages, comprising the steps of:

providing a communication device in communication with an integrated encryption circuit embedded with encryption algorithms;

accessing said integrated encryption circuit to encrypt a message; encrypting said with said encryption algorithms;

providing a message header comprising a sender's private cypher key and a digital bit array;

encrypting said message header using a receiver's public encryption key; appending said encrypted message header to said encrypted message; and transmitting said encrypted message header and said encrypted message to a receiver.

- 19. (New) The method of claim 18 wherein said message is transmitted through an Internet.
- 20. (New) The method of claim 18 wherein said message is transmitted through an Intranet.

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- 21. (New) The method of claim 18 wherein said message is transmitted through an e-mail.
- 22. (New) The method of claim 18 wherein said message is transmitted through an wireless communication system.
- 23. (New) A method decrypting a message of claim 18 further comprising the steps of:

providing a communication device in communication with a integrated decryption circuit;

receiving an encrypted message and encrypted message header with said communication device;

accessing said integrated decryption circuit to decrypt said encrypted message and message header;

decrypting said message header with said decryption circuit; validating said message header with said decryption circuit; decrypting said message with said integrated decryption circuit; and deleting said private cypher key from said receiver's communication device.

24. (New) An apparatus of encrypting and decrypting Internet, Intranet, and E-mail messages, comprising:

a communication device;

an integrated circuit in communication with said communication device;
a random private cypher key generator embedded within said integrated circuit;
asymmetric encryption and decryption algorithms embedded within said
integrated circuit; and

symmetric encryption and decryption algorithms embedded within said integrated circuit.